

***LineUp With Math™* Alignment**
California Mathematics Content Standards

Number Sense

1.0 Students compare and order positive and negative fractions, decimals, and mixed numbers. Students solve problems involving fractions, ratios, proportions, and percentages:

Mathematics Content Standard

1.6 Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

Algebra and Functions

2.0 Students analyze and use tables, graphs, and rules to solve problems involving rates and proportions:

Mathematics Content Standard

2.1 Convert one unit of measurement to another (e.g., from feet to miles, from centimeters to inches).

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

Mathematical Reasoning

1.0 Students make decisions about how to approach problems:

Mathematics Content Standard

1.3 Determine when and how to break a problem into simpler parts.

***LineUp With Math™* Activities**

--Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.

2.0 Students use strategies, skills, and concepts in finding solutions:

Mathematics Content Standard

2.2 Apply strategies and results from simpler problems to more complex problems.

***LineUp With Math™* Activities**

--Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.

2.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

--Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.

2.7 Make precise calculations and check the validity of the results from the context of the problem.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

3.0 Students move beyond a particular problem by generalizing to other situations:

Mathematics Content Standard

3.2 Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.

3.3 Develop generalizations of the results obtained and apply them in other circumstances.

***LineUp With Math™* Activities**

--Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.